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DAILY CURRENT AFFAIRS DATED 08.05.2026

GS Paper III: Disaster Management

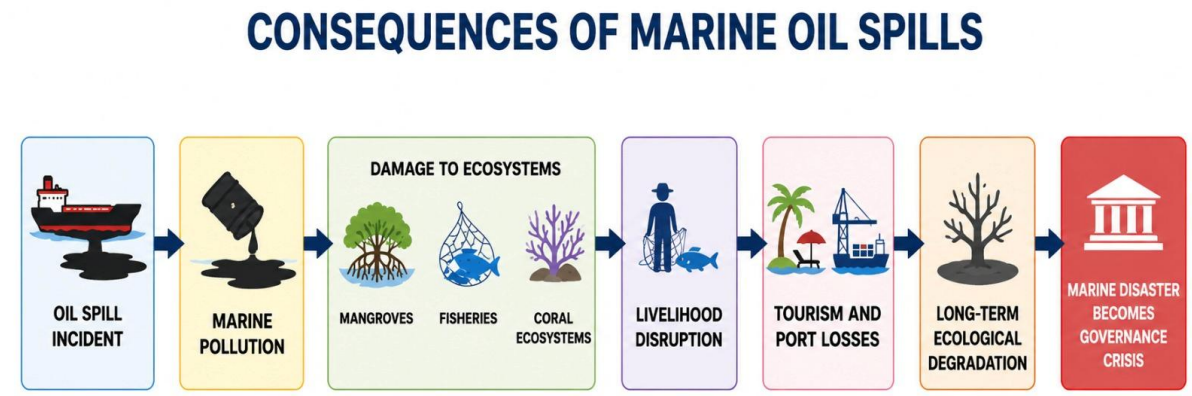
1. Kerala's Oil Spill Contingency Plan (OSCP)

a. Introduction

Oil spills are among the most serious forms of marine environmental disasters. They cause extensive ecological damage, disrupt fisheries and coastal livelihoods, threaten biodiversity, and impose long-term economic costs on coastal regions.

India's growing maritime trade, expanding port infrastructure, increasing offshore activities, and rising shipping traffic have amplified the risk of marine pollution incidents along its coastline. In this context, coastal States are increasingly focusing on preparedness and rapid-response systems for marine disasters.

Kerala's Oil Spill Contingency Plan (OSCP) represents an important initiative aimed at strengthening coastal disaster preparedness, protecting fragile marine ecosystems, and improving institutional coordination for oil spill management.



b. Understanding Oil Spills

i. Meaning of Oil Spill

An oil spill refers to the release of petroleum hydrocarbons into marine or coastal environments due to:

- Ship collisions
- Tanker accidents
- Offshore drilling incidents
- Pipeline leakages
- Port-related operational failures

Oil spills may occur in oceans, coastal waters, estuaries, rivers, or ports.

ii. Environmental Impact of Oil Spills

Ecological Consequences

Oil spills can cause:

- Marine biodiversity loss
- Destruction of coral reefs and mangroves
- Damage to fisheries and aquatic habitats
- Toxic contamination of coastal ecosystems

Economic and Social Consequences

They also affect:

- Coastal tourism
- Fisheries-based livelihoods
- Port operations
- Public health and sanitation

Thus, oil spills are not merely environmental problems but major governance and disaster management challenges.

The increasing vulnerability of India's coastline has therefore highlighted the need for comprehensive marine disaster preparedness mechanisms.

c. Kerala's Vulnerability to Oil Spill Disasters

Geographical Vulnerability

Kerala possesses a coastline of nearly 590 kilometres along the Arabian Sea.

Important vulnerabilities include:

- Dense coastal population
- Fragile estuarine ecosystems
- Presence of mangroves and wetlands
- High dependence on marine resources

Economic Vulnerability

Kerala's economy is closely linked to:

- Fisheries
- Coastal tourism
- Port activities
- Maritime trade

Marine pollution therefore directly threatens livelihoods and regional economic stability.

Maritime Traffic Risks

International shipping routes and oil transportation corridors pass close to Kerala's coast, increasing the probability of:

- Ship collisions
- Hazardous cargo accidents
- Oil tanker incidents
- Marine pollution events

These vulnerabilities make Kerala particularly susceptible to marine environmental disasters.

The recent maritime accidents off Kerala's coast further exposed gaps in preparedness and response mechanisms.

d. Maritime Incidents that Triggered the OSCP

i. MSC Elsa 3 Incident

Major Features

On 25 May 2025, the cargo vessel MSC Elsa 3 sank off the Kerala coast carrying:

- 640 containers
- Hazardous cargo containers
- Calcium carbide consignments

Environmental Impact

The accident led to the release of plastic pellets known as nurdles along Kerala's coastline, raising concerns regarding:

- Marine plastic pollution
- Coastal contamination
- Fisheries disruption

ii. MV Wan Hai 503 Incident

Another maritime accident involving MV Wan Hai 503 intensified fears relating to:

- Oil contamination
- Marine ecosystem degradation
- Biodiversity loss
- Coastal livelihood disruption

These incidents collectively demonstrated the urgent need for a scientific and coordinated marine disaster response system.

e. Oil Spill Contingency Plan (OSCP)

Meaning and Purpose

The Oil Spill Contingency Plan is a disaster management framework designed to:

- Prevent oil spill disasters
- Mitigate environmental damage
- Coordinate emergency response
- Restore affected ecosystems

The plan aims to establish a structured and time-bound mechanism for handling marine pollution emergencies.

Coverage Area

The framework covers:

- Marine spills within 12 nautical miles from the coastline
- Inland tidal river systems extending up to 40 kilometres or until tidal influence exists

Thus, the OSCP integrates both marine and coastal ecosystem management.

f. Key Features of Kerala's OSCP

Environmental Sensitive Index (ESI) Mapping

The plan includes scientific identification of ecologically fragile areas such as:

- Mangroves
- Wetlands
- Estuaries
- Turtle nesting sites
- Fishing zones
- Tourism regions

This helps authorities prioritise protection and response strategies during spill incidents.

Emergency Response Framework

The OSCP proposes:

- Oil spill response guidelines
- Shoreline response plans
- Tactical booming operations
- Wildlife rescue systems
- Marine emergency protocols

The objective is to minimise ecological damage through faster containment.

Institutional Coordination Mechanism

Component	Purpose
Chain of Command	Defines leadership hierarchy
Departmental Roles	Assigns responsibilities to agencies
Resource Database	Maintains inventory of manpower and equipment
Contact Network	Enables emergency communication

The emphasis is on coordinated inter-agency action during marine emergencies.

Shoreline Clean-up Strategy

The plan includes:

- Oil characteristic assessment
- Shoreline vulnerability analysis
- Selection of clean-up methods
- Priority protection of sensitive ecosystems

Wildlife and Ecosystem Protection

The framework proposes:

- Marine wildlife rescue
- Habitat restoration
- Fisheries protection
- Long-term ecological rehabilitation

These measures are especially important for coastal communities dependent on marine resources.

The OSCP therefore combines disaster response with ecological restoration and coastal governance.

g. Scientific and Technical Components

Predictive and Monitoring Systems

The draft plan incorporates:

- Hydrodynamic modelling
- Oil spill trajectory modelling
- Marine sensitivity mapping
- Net Environmental Benefit Analysis

Importance of Scientific Planning

These technologies help authorities:

- Predict spill movement
- Identify ecological impact zones
- Determine optimal clean-up strategies
- Improve response efficiency

Scientific preparedness significantly reduces environmental and economic losses during marine disasters.

h. Alignment with National Frameworks

National Oil Spill Disaster Contingency Plan

Kerala's OSCP aligns with the National Oil Spill Disaster Contingency Plan.

The framework incorporates guidelines issued in:

- 2015
- 2018
- 2024

Role of Indian Coast Guard

The Indian Coast Guard functions as the central agency for marine oil pollution response in India.

Its responsibilities include:

- Marine surveillance
- Emergency coordination
- Pollution containment
- Technical support

This integration strengthens national maritime disaster preparedness.

i. Significance of Kerala's OSCP

Environmental Significance

The plan helps protect:

- Mangroves
- Coastal wetlands
- Marine biodiversity
- Estuarine ecosystems

Economic Significance

The framework safeguards:

- Fisheries
- Tourism
- Coastal livelihoods
- Port operations

It also reduces long-term clean-up costs.

Governance Significance

The OSCP strengthens:

- Inter-agency coordination
- Coastal disaster preparedness
- Scientific governance
- Environmental monitoring

Strategic Significance

The plan gains importance because of:

- Rising maritime trade
- Increasing shipping traffic in the Arabian Sea
- India's Blue Economy ambitions
- Growing emphasis on maritime security

Thus, oil spill preparedness is increasingly becoming part of broader national maritime governance.

j. Challenges in Implementation

Financial Constraints

Oil spill response infrastructure requires:

- Specialised containment equipment
- Surveillance systems
- Technical laboratories
- Emergency logistics

Coordination Challenges

Effective response requires coordination among:

- State agencies
- Port authorities

- Fisheries departments
- Coast Guard units

Technological Limitations

India still faces limitations in:

- Advanced marine surveillance
- Real-time spill modelling
- Predictive technologies

Climatic and Operational Difficulties

Rough sea conditions and monsoon weather complicate:

- Oil containment
- Shoreline recovery
- Rescue operations

These challenges require long-term institutional strengthening and sustained investment.

k. Way Forward

India requires an integrated coastal disaster management approach combining environmental governance, maritime security, and scientific preparedness.

Institutional Strengthening

- Develop specialised marine pollution response units
- Improve coordination with the Indian Coast Guard
- Conduct regular mock drills and capacity-building exercises

Technological Improvements

- Strengthen coastal surveillance systems
- Expand predictive modelling capabilities
- Improve real-time monitoring infrastructure

Sustainable Maritime Practices

- Promote safer shipping practices
- Integrate oil spill preparedness with Blue Economy planning
- Strengthen coastal ecosystem restoration programmes

Greater investment in marine governance and disaster resilience is essential for protecting India's coastal regions from future environmental disasters.

Conclusion

Kerala's Oil Spill Contingency Plan reflects the growing importance of marine environmental security within India's coastal governance framework. Increasing maritime trade, expanding shipping activities, and rising Blue Economy initiatives have amplified the risks associated with marine pollution and coastal ecological disasters.

A robust oil spill preparedness and response system is therefore essential not only for environmental protection, but also for safeguarding fisheries, tourism, livelihoods, and maritime security. Kerala's initiative can serve as an important model for strengthening marine disaster management and coastal resilience across India.

Reader's Note — About This Current Affairs Compilation

Dear Aspirant,

This document is part of the PrepAlpine Current Affairs Series — designed to bring clarity, structure, and precision to your daily UPSC learning.

While every effort has been made to balance depth with brevity, please keep the following in mind:

1. Orientation & Purpose

This compilation is curated primarily from the UPSC Mains perspective — with emphasis on conceptual clarity, analytical depth, and interlinkages across GS papers.

However, the PrepAlpine team is simultaneously developing a dedicated Prelims-focused Current Affairs Series, designed for:

- factual coverage
- data recall
- Prelims-style MCQs
- objective pattern analysis

This Prelims Edition will be released separately as a standalone publication.

2. Content Length

Some sections may feel shorter or longer depending on topic relevance and news density.
To fit your personal preference, you may freely resize or summarize sections using any LLM tool (ChatGPT, Gemini, Claude, etc.) at your convenience.

3. Format Flexibility

The formatting combines:

- paragraphs
- lists
- tables
- visual cues

—all optimised for retention.

If you prefer a specific style (lists → paras, paras → tables, etc.), feel free to convert using any free LLM.

4. Monthly Current Affairs Release

The complete Monthly Current Affairs Module will be released soon, optimized to a compact 100–150 pages — comprehensive yet concise, exam-ready, and revision-efficient.